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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,218	10/23/2001	Albertus Maria Gerardus Claessen	8913	4019
26884	7590	10/27/2005	EXAMINER	
PAUL W. MARTIN NCR CORPORATION, LAW DEPT. 1700 S. PATTERSON BLVD. DAYTON, OH 45479-0001			TRAN, KHAI	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/036,218

Applicant(s)

GERARDUS CLAESSEN,  
ALBERTUS MARIA

Examiner

KHAI TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The amendment filed 8/10/2005 has been entered. Claims 1-33 are pending in this Office action.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman et al (U.S. Pat. 6,108,367) in view of Carrender (U.S. 2002/014984 A1).

Regarding claims 1, 4, Herman et al disclose a electronic price label (ESL) system comprising: an ESL receiving a message transmitted from a communication base station (a communication between from the transceiver mounted on ceiling and a multiplicity of ESL (or tags) (col. 4, lines 10-28), the ESL including a transmitter for transmitting a response to the message by reflectively modulating a continuous wave (CW) signal with a pseudo random code sequence (col. 3, lines 30-46, and col. 4, line 46 to col. 5, line 20 which show that the transceiver correlates the received reflective signal). Herman et al fail to disclose or suggest that the ESL modulates the received signal with a pseudo-random code sequence so as to impose the pseudo-random code sequence on the signal.

Carrender discloses a radio frequency identification (RFID) tag comprising: means for sequentially generating radio-frequency signals at pseudo-randomly selected

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frequency using a frequency-hopping source of an RFID interrogator (page 3, claim 14 from the right handsite); and the RFID tag modulating and reflecting the transmitted signal back to the interrogator 23 (page 2, paragraph # 7 at the left handsite); and the transmitter having a generator for producing a pseudo-random code sequence (see page [0019]. It would have been obvious to one having ordinary skill in the art at the time invention was made to implement the PN generator for generating a plurality of pseudo-random code sequences as taught by Carrender into the teachings of Herman et al in order to perform a correlation and receive matched data.

Regarding claim 2, Herman et al disclose wherein the CW signal is transmitted by the communication base station (CBS) during a time period in which the ESL response (col. 3, lines 30-46, and col. 10, lines 33-47).

Regarding claim 3, Carrender discloses the pseudo random code sequence is selected by the ESL from a plurality of pseudo random code sequences (page 3, claim 14 from the right handsite).

Regarding claim 5, Herman et al fail to explicitly disclose the carrier oscillating at about 32 kHz. However, Herman et al disclose a carrier oscillator (18) for creating the two frequency components around the frequency of the incoming signal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to enable the carrier to oscillate at about 32 kHz in order to meet a require of the FCC regulation.

Regarding claims 6-8, Herman et al disclose the message being transmitted to ESL using a Manchester coded amplitude modulated carrier (col. 4, lines 10-27); and

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the message including a command instructing the ESL to perform an action and the response including an acknowledge indicating the ESL successfully performed the action (col. 10, lines 33-47).

Regarding claims 9-10, Herman et al also disclose the ESL for selecting a seed value corresponding to the response and generating the pseudo random code based on the seed value (col. 6, lines 25-42).

Regarding claims 11-12, Herman et al disclose the ESL modulating the code sequence onto a carrier to generate a digitally modulated signal (see Fig. 1).

Regarding claims 13-14, wherein the CDS bandpass filters the response and performs demodulation to remove the carrier (see Fig. 7, and col. 9, lines 44-60); the CBS correlates the response (col. 4, line 46 to col. 5, line 20).

Regarding claim 15, Herman et al disclose the CBS relaying the response to a host system for identification (col. 6, lines 1-12).

Claims 16-23 are similar to claims 1, 9-15. Therefore, claims 16-23 are rejected under a similar rationale.

Claims 24-33 are similar to claims 1-13. Therefore, claims 24-33 are rejected under a similar rationale.

### ***Response to Arguments***

4. Applicant's arguments filed 8/10/2005 have been fully considered but they are not persuasive.

Applicant argues that Carrender fails to cure the deficiencies of Herman. Currander addresses a frequency- hopping radio frequency identification (RFID) system

which includes an RF interrogator or reader and an RID tag. The RF interrogator uses a frequency-hopping source to generate and transmit interrogation signals at pseudo-randomly selected frequencies which are reflected by an RFID tag. Carrender, p.1, [0012]. The RFID tag does not generate a pseudo-random code sequence and does not modulate the received signals with the pseudo-random code sequence so as to impose the pseudo-random code sequence on the signal, as claimed in claim 1, as amended.

In response to the Applicant's argument that Carrender discloses that one skilled in the art will recognize that there are many ways of implementing the frequency-hopping source 24. For example, a digital controller can be configured to generate pseudo-random code that is converted to an analog signal by a digital to analog converter [0019] and [0021].

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KHAI TRAN  
Primary Examiner  
Art Unit 2637

**KT**  
**October 25, 2005**